

SPECIFICATION:

Page 9, Lines ²⁶¹~~10~~33:

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C1

Figure 3 is a photograph demonstrating the specificity of rabbit antiserum to ebaF by Western blot analysis; in each lane, 10µg of extracted endometrial proteins was resolved in a 15% gel by SDS-PAGE and then subjected to Western blot analysis; the blot was probed with the antiserum alone (left lane) and with the antiserum-preincubated with a 100 molar excess of the CASDGALVPRRLQHRP-amide (Seq. ID. No. 3);

Page 16, Lines 1-7:

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lane 1: molecular weight markers. 75 µg of placental proteins (lane 2), and cytosolic proteins of late proliferative (lanes 3-4) and the late secretory (lanes 5-7) endometria were subjected to Western blot analysis using the affinity purified rabbit antiserum against a peptide (CASDGALVPRRLQHRP-amide) (Seq. ID. No. 3) at the C terminal domain of the ebaF;

Page 17, Lines 1-6:

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rabbit anti-serum to ebaF by Western blot analysis; A: in each lane, 10 micrograms of extracted endometrial proteins was resolved in a 15% gel by SDS-PAGE and then subjected to Western blot analysis; the blot was probed with the anti-serum alone (left lane) and with the antiserum-preincubated with a 100 molar excess of the CASDGALVPRRLQHRP-amide (Seq. ID. No. 3);

Page 27, Lines 20-27:

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One additional embodiment of the present invention is the development of an antisera for *ebaf*. An antibody with specificity is useful in determining the presence of *ebaf*, or an *ebaf* variant, in a sample. By variant, it is meant that an variant which is functionally relevant. Further, the peptide CASDGALVPRRLQHRP-amide (Seq. ID. No. 3), as demonstrated in the examples below, has been shown to be effective in the development of such an antisera.

Page 47, Lines 11-22:

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The polyclonal rabbit antibody raised against a synthetic peptide at the C terminal domain of the *ebaf* reacted with a major 41 kDa protein in the placenta as well as the endometrium. In the case of *lefty*, which is the mouse homologue of the human *ebaf*, the expression of the protein in 293T cells led to formation of a non-secretory, 42 kDa protein which is the size of the pre-pro-protein (Meno *et al*, 1996). The predicted size of the pre-pro-protein of the *ebaf* is 41 kDa. The members of the TGF- β super family are synthesized as pre-pro-proteins which are cleaved at RXXR (Seq. ID. No. 2) sites to release the mature form of the protein. The predicted protein of *ebaf* exhibits two such RXXR sites (Seq. ID. No. 2) which are located at amino acid residues of 73-76 and 131-134 respectively (Kothapalli *et al*, 1997).

Page 48, Lines 1-2:

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to cleavage at the first and second RXXR (Seq. ID. No. 2) sites respectively (Kothapalli *et al*, 1997).

Page 55, Lines 1-4:

NE CB expected to be secreted (Table 2). To detect such proteins in human endometrium, an antiserum was raised against the peptide CASDGALVPRRLQHRP-amide (Seq. ID. No. 3) at the COOH terminal of the *ebaf* protein.

Page 62, Lines 14-21:

CA PCR was carried out as described using the 5' primer (B2P9): TCAGCGAGGTGCCCCGTACT (Seq. ID. No. 4) and 3' primer (B2P1): AGTTCTTAGAGCTGAAGCC (Seq. ID. No. 5). Briefly, 1 µg of reverse transcribed RNA was amplified with 0.5-1 µM of each of the 5' and 3' primers specific for *ebaf* in a 50 µl reaction volume containing 1.25 U AmpliTaq DNA polymerase, 1.25 mM MgCl₂, 20 µM of each of dATP, dCTP, dGTP, dTTP, 10 mM Tris-HCl (pH 8.3), 50 mM KCl, and sterile distilled water.

Page 65, Lines 22-26:

CS Premature Expression Of *ebaf* protein In The Endometria Of Infertile Patients: To localize the *ebaf* protein in endometrium, two polyclonal rabbit antisera were raised against a sequence (CASDGALVPRRLQHRP) (Seq. ID. No. 3) that resides at the carboxy terminal end of the express *ebaf*.

Page 71, Lines 8-13:

CA A monoclonal and rabbit antisera were raised against the peptide CASDGALVPRRLQHRP-amide (Seq. ID. No. 3) at the COOH terminal (Tabibzadeh et al, 1998) and to acetyl-DRADMEKLVIPAC peptide (Seq. ID. No. 6) at the NH₂ terminal of the *ebaf* (Figures 25-26). Rabbit antiserum to CASDGALVPR RLQHRP-amide (Seq. ID. No. 3) was purified on a peptide column.

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Please insert Sequence Listing after Page 81, after Table 7, of the Specification.